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Amended Appeal Brief
Patent 10/797,857

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(LHTLG No. 00,1247-A)

In re Application of: Matthew A. Fordham)	
)	
Serial No. 10/797,857)	Examiner: Paul Kim
)	
Filed: March 10, 2004)	Group Art Unit: 2161
)	
For: METHOD AND SYSTEM FOR CREATING VERTICAL SEARCH ENGINES)	Conformation No. 3724
)	

MAIL STOP: Appeal
Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

TRANSMITTAL LETTER

1. We are including herewith the attached papers for the above identified patent application:

- ☒ **AMENDED** PATENT APPEAL BRIEF under 37 C.F.R. §1.192 (59 pages).
- ☒ Response Non-Compliant Appeal Brief Mailed November. 16, 2007 (1 page).
- ☒ Return Postcard.

2. **FEES:** No fees are required.

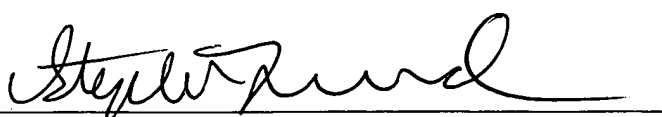
3. **GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES:** No other fees or extensions of time are required. Should these assumptions be incorrect please charge any additional fees or credit overpayment to Deposit Account No. **50-2281** for **Lesavich High-Tech Law Group, PC. (32097)** and consider this a petition and request therefor for an extension of time under 37 CFR § 1.136.

4. **CERTIFICATE OF MAILING under 37 CFR § 1.10**, the correspondence identified above was deposited with the United States Postal Service as "Express Mail Post Office to Addressee," addressed to the Mail Stop: Appeal Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 on the 13th Day of **December 2007**. Express Mail Number **EV957084064US**.

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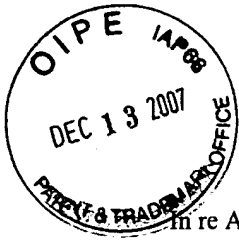
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December 13, 2007



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In re Application of: **Matthew A. Fordham**

Serial No. **10/797,857**

Filed: **March 10, 2004**

For: **METHOD AND SYSTEM FOR
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ENGINES**

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) Examiner: **Paul Kim**
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) Group Art Unit: **2161**
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) Conformation No. **3724**
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RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF
MAILED November 16, 2007
(37 CFR 41.37)

The Appellant responds to the Notification of Non-Compliant Appeal Brief mailed November 16, 2007, within one (1) month. The Appellant has corrected the heading for the "Summary of the Claimed Invention" and the summary of claimed subject matter for independent claims (1, 23, 26 and 27) as required. The Patent Appeal Center Specialist, Mr. Timothy Cole, indicated that the Appellant need only file a copy of the amended appeal brief and not include the additional documents cited in the appendixes with the amended appeal brief. However, should the Appellant be required to re-submit the additional document cited in the appendixes, the Appellant will immediately do so.

Respectfully submitted,

Lesavich High-Tech Law Group, P.C.

Stephen Lesavich
Registration No. 43,749

December 13, 2007



PATENT APPEAL BRIEF
Application No. 10/797,857
Examiner: Paul Kim
Art Unit: 2161
Applicant: Fordham

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PATENT APPEAL BRIEF

37 C.F.R. §1.192

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Table of Contents

BRIEF OF APPELLANT	3
REAL PARTY IN INTEREST.....	3
RELATED APPEALS AND INTERFERENCES	3
STATUS OF CLAIMS	4
STATUS OF AMENDMENTS.....	4
SUMMARY OF THE CLAIMED SUBJECT MATTER.....	5
GROUND OF REJECTION TO BE REVIEWED ON APPEAL	12
ARGUMENT	13
ARGUMENT FOR REJECTION 1	13
CONCLUSION FOR REJECTION 1	22
ARGUMENT FOR REJECTION 2	23
CONCLUSION FOR REJECTION 2	33
ARGUMENT FOR REJECTION 3	34
CONCLUSION FOR REJECTION 3	40
ARGUMENT FOR REJECTION 4	41
CONCLUSION FOR REJECTION 4	44
ARGUMENT FOR REJECTION 5	45
CONCLUSION FOR REJECTION 5	45
CONCLUSION FOR ALL ISSUES	46
CLAIMS LISTING APPENDIX	47
EVIDENCE APPENDIX.....	58
RELATED PROCEEDINGS APPENDIX	59

BRIEF OF APPELLANT

This is a Patent Appeal Brief submitted under 37 C.F.R. § 1.192 to the Board of Patent Appeals and Interferences from the second rejection of all of the claims of the application. This Appeal Brief is accompanied by the requisite fee set forth in 37 C.F.R. § 41.20(b)(2) for a small entity under 37 C.F.R. § 1.27(a). The Notice of Appeal under 37 C.F.R. § 1.191 was filed on August 28, 2007.

This Appeal Brief is also a response to the assertions the Examiner made in the Final Office Action mailed May 16, 2007. The Appellant traverses all of the Examiner's assertions in this Final Office Action. The Appellant may respond to selected assertions by the Examiner, but the Appellant intends to traverse all of the Examiner's assertions in the Final Office Action.

REAL PARTY IN INTEREST

Logika Corporation, 3717 North Ravenswood, Suite 243, Chicago, IL 60613 that Assignee of the present application, is the real-party in interest.

RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences known to the Appellant.

STATUS OF CLAIMS

The status of the claims is as follows:

1. Claims at filing: 1-25
2. Claims 14-22 canceled in a Preliminary Amendment filed March 10, 2004, and claims 26-27 added in an Amendment filed February 6, 2007.
3. Claims pending: 1-13 and 23-27.
4. Claims rejected: 1-13 and 23-27
5. Claims allowed: Claims 6-13 were deemed as allowable subject matter in the First Office action. The Examiner withdraw the allowable subject matter in the Final Office Action.

Thus, the claims on appeal are claims 1-13 and 23-37.

STATUS OF AMENDMENTS

The amendments filed on March 10, 2004 and February 6, 2007, have been entered as understood by the Appellant.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The Appellant has added the number in parenthesis for the Board. The numbers without parenthesis were part of the original application.

Common Information for Claims 1, 23, 24, 26, 27

FIG. 1 is a block diagram that illustrates an exemplary vertical search engine system 10. The vertical search engine system 10 includes, but is not limited to, one or more client network devices 12, 14, 16 (only three of which are illustrated).

The client network devices 12, 14, 16 include, but are not limited to, personal computers, wireless devices, laptop computers, mobile phones, personal information devices, personal digital assistants, hand-held devices, network appliances, pagers, and other types of electronic devices. However, the present invention is not limited to these devices and more, fewer or others types of client electronic devices can also be used.

The client network devices 12, 14, 16 are in communications with a computer network 18 (e.g., the Internet, intranet, etc.). The communication includes, but is not limited to, communications over a wire connected to the client network devices, wireless communications, and other types of communications.

*Plural server network devices 20, 22, 24, 26 (only four of which are illustrated) with one or more associated databases 20', 22', 24', 26' are in communications with the computer network 18. The plural network devices 20, 22, 24, 26 are part of a "domain name system" 28. Other server devices 29 (one of which is illustrated) are used to provide access to a vortal created with the present invention and described below. (**Application, Page 9, lines 3- 19**).*

The vertical search engine system 10 further includes one or more (only one is illustrated) vertical search engine servers 30 with associated databases 30'. However, more, fewer or other components can also be used and the present invention is not limited to the illustrated components.

An operating environment for components of the vertical search engine system 10 for preferred embodiments of the present invention include a processing system

with at least one high speed Central Processing Unit ("CPU") and a memory. In accordance with the practices of persons skilled in the art of computer programming, the present invention is described below with reference to acts and symbolic representations of operations or instructions that are performed by the processing system, unless indicated otherwise. Such acts and operations or instructions are referred to as being "computer-executed," "CPU-executed," or "processor-executed."

It will be appreciated that acts and symbolically represented operations or instructions include the manipulation of electrical signals or biological signals by the CPU. An electrical system represents data bits which cause a resulting transformation or reduction of the electrical signals, and the maintenance of data bits at memory locations in a memory system to thereby reconfigure or otherwise alter the CPU's operation, as well as other processing of signals. The memory locations where data bits are maintained are physical locations that have particular electrical, magnetic, optical, or organic properties corresponding to the data bits.

The data bits may also be maintained on a computer readable medium including magnetic disks, optical disks, organic memory, and any other volatile (e.g., Random Access Memory ("RAM")) or non-volatile (e.g., Read-Only Memory ("ROM")) mass storage system readable by the CPU. The computer readable medium includes cooperating or interconnected computer readable medium, which exist exclusively on the processing system or be distributed among multiple interconnected processing systems that may be local or remote to the processing system. (Application, Page 11, line 3 through Page 12, line 6).

A vortal is a specific type of search engine (i.e., vertical search engine) that provides information and resources related only to one (or a small number) specific topic. These sites typically contain focused information, such as "vertical" or "in-depth" information pertinent only to their particular targeted topic of interest. Vortals include information pertinent to a targeted topic of a very small horizontal breath, but a larger depth. Vortals are designed to include "the" source of pertinent information on the World-Wide-Web for a "community of interest." Vortals typically

provide news, research and statistics, discussions, newsletters, online tools, and many other services that educate users about a specific topic. Vortals typically use specialized searching algorithms to search and provide only information about a specific topic.

For example, a vortal may be created for people interested in the sport of golf. On a general search engine, if a user typed in a search using the vague keyword "Tiger" to search for URLs including hyperlinks to information about the golfer Tiger Woods, the general search engine would return thousands of URLs including animals, product names, nick-names, television programs, movie names and a large amount of other information. The user would have to look through a large number of pages to find information on the golfer Tiger Woods.

A user could qualify a search on a general search engine. For example, a user may enter a search using the keywords "Tiger and Golf" or "Tiger Woods." However, such a search on a general search engine still returns information un-related to the golfer Tiger Woods such as information about animals and forestry. In addition, most general search engines and require a user develop some knowledge and expertise on how general search engines work to create and successfully use a qualified search.

In contrast, on a vortal specifically designed for golf, entering a search using the vague keyword "Tiger" would only return information about the golfer Tiger Woods. A user would have to sort through, very little if any, information not related to the golfer Tiger Woods. Even very vague search terms on a vortal can be used to return highly relevant search results for a particular vortal. (Application, page 4, line 9, through page 5, line 14).

CLAIM 1

FIGS. 3A and 3B are a flow diagram illustrating a Method 56 for creating a vertical search engine (29). In FIG. 3A at Step 58, a list of plural keywords to be used for the vertical search engine is received on a network device (30). The list of keywords includes general and specific keywords for a selected subject. At Step 60, the list of plural keywords is processed to create a refined list of keywords. The processing includes adding, subtracting or modifying the list of plural keywords.

At Step 62, plural first index files associated with plural first data files are created by checking plural domain names from plural domain name files associated with a domain name system (28) for a computer network 18. The plural first index files include plural pointers to the associated first data files. The plural data files include plural entries including electronic information extracted from plural web-sites (20, 22, 24, 36) associated with plural active domain names from the plural domain name files. At Step 64, plural second index files with associated a plural second data files are created by searching the plural first index files for keywords from the refined list of keywords. The plural second index files include plural pointers to the associated plural second data files. The plural second data files include plural entries including electronic information extracted from plural web-sites associated with the plural active domain names for keywords from the refined list of keywords. In FIG. 3B at Step 66, entries in the plural second index files are verified as appropriate for the selected subject. At Step 68, a final index is created from the verified entries in the plural second index files. At Step 70, a vortal (29, 29') is made accessible on another network device (29) via the computer network (18) for the selected subject using the final index. (Application, page 14, line 22 through page 15, line 20).

CLAIM 23

Vertical search engine system (10) a vertical search engine server (30) with associated database for indexing and searching a plurality of top-level domain name files (20, 22, 24, 26) associated with a domain name system (28) for a computer network (18) for a selected list of keywords for a selected topic, for indexing and searching electronic content from a plurality of web-sites identified by a plurality of domain names from the plurality of top-level domain name files (20', 22' 24' 26') and for creating a vortal index from the indexed plurality of top-level domain name files and the electronic content from the plurality of web-sites; and a protocol stack (32) on the vertical search engine server (30) for communicating with other network devices (12, 14, 16) on the computer network (18); and a server network device (29) for making a vortal accessible on a network device (12, 14,16) via the computer network (18) for a selected subject using the vertical index created by the vertical search

engine server (30). (FIG. 1, FIG. 2, Application, page 4, line 9, through page 5, line 14, Application, Page 9, lines 3- 19, Page 11, line 3 through Page 12, line 6).

CLAIM 26

*A method for creating a vertical search engine (29), comprising: receiving a list of a plurality of keywords to be used for the vertical search engine on a network device (30), wherein the list of keywords includes general and specific keywords for a selected subject; processing the list of plurality of keywords to create a refined list of keywords, wherein the processing includes adding, subtracting or modifying automatically the list of plurality of keywords; creating a plurality of first index files associated with a plurality of first data files by checking a plurality of domain names from a plurality of domain name files (20', 22', 24', 26') associated with a domain name system (28) for a computer network (18), wherein the plurality of first index files include a plurality of pointers to the associated data files, and wherein the plurality of first data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with a plurality of active domain names from the plurality of domain name files, **(FIG. 1, FIG. 2, FIG. 3A, Application, page 14, line 22 through page 15, line 20)** wherein the step of creating the plurality of first index files includes: opening a plurality of top-level domain name files associated with the domain name system (28) for the computer network (18); checking a plurality of domain names from the plurality of open top-level domain name files to determine whether any of the plurality of domain names are associated with an active web-site on the computer network (18); extracting domain names in the plurality of open top-level domain name files associated with active web-sites on the computer network (18); storing the extracted domains names in a plurality of entries in a plurality of separate files, thereby creating a plurality of separate files including the plurality of entries; and sorting each of the plurality of separate files based on a pre-determined sorting scheme to create a plurality of sorted separate files; creating a plurality of second index files with associated plurality of second data files by searching the plurality of first index files for keywords from the refined list of keywords, wherein the plurality of second index files include a plurality*

of pointers to the associated plurality of second data files, and wherein the plurality of second data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with the plurality of active domain names for keywords from the refined list of keywords; (FIG. 1, FIG. 2, FIG. 4, Application page 18, line 4, through page 21, line 8). verifying that entries in the plurality of second index files are appropriate for the selected subject; creating a final index from the plurality of entries first index; and making a vortal (29) accessible on another network device (29, 29') via the computer network (18) for the selected subject using the final index. (FIG. 1, FIG. 2, 3B Application, page 15, line 17 through page 21, line 7).

CLAIM 27

A method for creating a vertical search engine (29), comprising: receiving a list of a plurality of keywords to be used for the vertical search engine(29) on a network device (30), wherein the list of keywords includes general and specific keywords for a selected subject; processing the list of plurality of keywords to create a refined list of keywords, wherein the processing includes adding, subtracting or modifying automatically the list of plurality of keywords; creating a plurality of first index files associated with a plurality of first data files by checking a plurality of domain names from a plurality of domain name files (20', 22', 24' 26') associated with a domain name system (28) for a computer network (18), wherein the plurality of first index files include a plurality of pointers to the associated data files, and wherein the plurality of first data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with a plurality of active domain names from the plurality of domain name files, (FIG. 1, FIG. 2, FIG. 3A, Application, page 14, line 22 through page 15, line 20) wherein the step of creating a plurality of first index files includes: (a) selecting a keyword from the refined list of keywords; (b) determining whether the selected keyword comprises multiple words, and if so, (c) selecting a word with the greatest number of individual characters from the multiple words comprising the selected keyword, (d) opening a one of a plurality of sorted separate files based on a first character of the selected

word from the selected keyword, wherein the plurality of sorted separate file were created by indexing a plurality of domain name files associated with a domain name system for the refined list of keywords, and (e) searching the open sorted separate file for the selected word from the selected keyword, (f) repeating steps (c) through (e) for remaining words in the selected keyword; and if not, (g) opening a one of a plurality of sorted separate files based on a first character of the selected keyword, wherein the plurality of sorted separate file were created by indexing a plurality of domain name files associated with a domain name system for the refined list of keywords, and (h) searching the open sorted separate file for the selected keyword; (i) determining whether the selected keyword has been found in the open separate sorted, file, and if so, (j) adding an entry to a first index file for the selected keyword; (k) repeating steps (a), (b) and (i) for remaining keywords from the refined list of keywords; creating a plurality of second index files with associated plurality of second data files by searching the plurality of first index files for keywords from the refined list of keywords, wherein the plurality of second index files include a plurality of pointers to the associated plurality of second data files, and wherein the plurality of second data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with the plurality of active domain names for keywords from the refined list of keywords; (FIG. 1, FIG. 2, FIGS. 6A and 6B, Application Page 25, line 19 through pages 30, line 17) verifying that entries in the plurality of second index files are appropriate for the selected subject; creating a final index from the plurality of entries first index; and making a vortal (29) accessible on another network device (29, 29') via the computer network (18) for the selected subject using the final index. (FIG. 1, FIG. 2, 3B Application, page 15, line 17 through page 21, line 7).

GROUND S OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether Examiner Kim is not fairly considering either the unique features of the Appellant's claimed invention or the Appellant's arguments for patentability based on his comments in the "Response to Arguments" section.
2. Whether Examiner Kim has correctly applied 35 U.S.C. §101 and rejected claims 1-13 and 23-27.
3. Whether Examiner Kim has correctly applied 35 U.S.C. §103 rejecting claims 1, 2, 4 and 23 as being unpatentable over Berstis (U.S. Patent No. 6,490,575, hereinafter referred to as BERSTIS) in view of Brady et al (U.S. Patent No. 6,463,430).
4. Whether Examiner Kim has correctly applied 35 U.S.C. §103 rejecting claims 3, 24 and 25 as being unpatentable over BERSTIS, in view of BRADY, and in further view of *Official Notice*.
5. Whether Examiner Kim has correctly applied 35 U.S.C. §103 rejecting Claim 5 as being unpatentable over BERSTIS, in view of BRADY, and in further view Sullivan et al (U.S. Patent No. 5,956,711).

ARGUMENT

ARGUMENT FOR REJECTION 1

The Appellant would like the Board to know that the Appellant's attorney has been a patent attorney for the past twelve years and has a PhD in computer science. He has successfully prosecuted hundreds of software inventions to issued patents.

Every time a new set of Examiner's is hired, it seems large numbers of improper rejections are sent out by USPTO. As the Board can appreciate, the applicant's (i.e., the clients) of such applications become very angry and frustrated as the appeal process for improper rejections adds years to an examination process that proceeds at a glacial pace.

Respectfully, Examiner Kim is not a primary examiner and his analysis and his rejections of the current matter clearly reflect that fact.

Examiner Kim clearly has shown a bias toward the Appellant is not treating the Appellant's application or the Appellant's comments fairly. In part, because the Appellant has pointed in many errors in the Examiner's analysis of the present application. Something the Appellant clearly has to the right to do under U.S. patent laws. However, Examiner Kim seemed to improperly take serious offense to the Appellant's comments and assertions. The Appellant's attorney has used either the same or similar comments hundreds of times. It is what patent attorney are required to do. Be a zealous advocate of their client's application with the USPTO.

No Examiner has appeared to take such serious offense with the Appellant's

language and argument as Examiner Kim has. The Appellant very respectfully asks the Board to consider the following evidence.

First, in the Appellant filed the current application as a Divisional Application on March 10, 2004, with a Preliminary Amendment filed on the same day. The Preliminary Amendment included claim amendments to cancel claims issued in U.S. Patent No. 6,714,934, with a corresponding parent application filed July 31, 2001, and an amendment for a priority claim to this issued patent. The Examiner did not consider the preliminary amendment at all before sending out his First Office Action.

The Preliminary Amendment was available on the PAIR system. The Examiner clearly should have been able to find and consider the Preliminary Amendment filed by the Appellant.

In the First Office Action, the Examiner asserted a Double Patenting Rejection and Request for a priority claim to the previous application which is a now an issued U.S. Patent. (First Office Action, pages 2-4). Two improper rejections that would not have been necessary if the Examiner had considered the file history for the present application before sending out his First Office Action.

In the Response to First Office Action, the Appellant pointed out to the Examiner that the Appellant had filed a Preliminary Amendment, the Examiner had not considered the Preliminary Amendment, that amended the claims and included a priority claim and that the rejections for the priority claim and the double patenting rejection were clearly improper. (First Response, pages 15 and 16).

In the First Office Action, the Examiner also rejected the Appellant's claim with 101 rejection asserting "the claims directed to a vertical search engine are non-statutory because they do not encompass tangible subject matter and no embodiments which fall into a statutory category." (First Office Action, page 4).

Since the Examiner had missed the Preliminary Amendment and had not considered it at all before sending out his First Office Action, the Appellant also stated the Appellant granted a patent for a vertical search engine by the U.S. Patent Office, as U.S. Patent No. 6,714,934, and the present application was a Divisional application of that application in which the U.S. patent office had already determined that claims directed to a vertical search engine were statutory subject matter. The Appellant did not request the Examiner make any comment on the issued patent. The Appellant was simply pointing that the current application was Divisional of an application that already issued as a patent. (First Response, page 16).

The Examiner then chastised the Applicant for the Applicant's response in the First Office Action and cites MPEP §1701 asserting the Applicant made *an improper inquiry to the Examiner*.

The Examiner asserted "*Likewise employees are cautioned against answering an inquiry concerning any entry in the patent or reexamination file, including the field of search and any entry related thereto.*"

Practitioners shall not make improper inquiries of the patent examining corps." (Underlining added by the Examiner).

The Board will note that the Appellant did not request the Examiner to make any comment about the issued patent by the Appellant. The Appellant instead was

simply trying to point out, that since the Examiner totally missed the Preliminary Amendment filed by the Appellant, that claims directed to vertical search engines had already been determined by the USPTO to fall within a statutory category and it would be beneficial for the Examiner to review the whole file history.

In addition, most of MPEP §1701 is directed to towards the rules for office personal with respect to testifying in legal proceedings.

The Appellant has the right to point out mistakes the Examiner makes in not considering papers filed by the Appellant and making improper rejections based on the missed papers. The Examiner then tries to apply section 1701 to cover up his mistake on not fully considering the whole file history of the application before sending out the First Office Action.

Second, the Examiner asserted “the level of innovation and importance of an invention are not provided any weight in the examination and review of patent applications.” (Final Office Action, Page 10).

This is clearly an error in the application of U.S. patent law. The Examiner should at minimum understand that level of innovation of an invention is exactly what he should be looking at under Section 101, 102 and 103 of the U.S. Patent laws.

The MPEP at section §2172 clearly states “an essential purpose of the examination process is to determine whether or not the claims define an invention that is both novel and nonobvious over the prior art.” The level of innovation of an invention is also used to determine the level of one skilled in the art. MPEP §2141.03. The Examiner combined references for several 103 rejections and makes

comments about one or ordinary skill in the art. How has the Examiner determined such level of skill when he has stated in writing, that the Examiner has not considered the level of innovation for the Appellant's invention? Clearly an error in the Examiner's analysis.

The importance of an invention is also clearly provided weight in the examination and review of patent applications. 37 C.F.R. 1.102(b) and MPEP §708.01. This is another error in the application of the patent rules by the Examiner, although the Appellant's invention may not directly fit into any of the categories outlined in these sections as deemed "important" by the U.S. Government, the importance of an invention is clearly provided weight during the examiner and review of patent applications.

Third, in the First Office Action, the Examiner indicated Claims 6-13 included allowable subject matter. The Examiner indicated that Claims 6-13 were objected to as being dependent on a base claim, but would be allowable if rewritten in independent format form including all the limitations of the base claim and any intervening claims. (First Office Action, page 9).

In the First Response, the Appellant added two new claims, Claims 26 and 27. Claim 6 was dependent only on Claim 1. Claim 26 included all the dependencies of Claim 1 and Claim 6. Claim 27 included all the dependencies of Claims 1, 6 and 13. The Examiner deemed such claims were allowable. The Examiner made no other comments about these allowable claims.

In the Final Office Action, even though the Examiner had indicated the subject matter was allowable in Claims 6-13, the Examiner rejected Claims 26 and

27 under 35 U.S.C. §101 as been directed to non-statutory subject matter. The Examiner also withdrew his objections to the allowable subject matter in Claims 6-13 and instead instituted a new rejection of claims 6-13. (Final Office Action, Office Action Summary Page, Disposition of the Claims, boxes 6 and 7).

The Examiner asserted that “While claims 6-13 have been indicated as being allowable but objected to as being dependent upon a rejected base claim, the Examiner notes that in order for said claims to be allowable, the rejections under 35 U.S.C. 101 must be overcome.” This is clearly a misapplication of U.S. patent law.

This action also clearly violates rule 706.04 of MPEP which deals with rejection of previously allowed claims. This section states that “*A claim noted as allowable shall thereafter be rejected only after the proposed rejection has been submitted to the primary examiner for consideration of all the facts and approval of the proposed action. Great care should be exercised in authorizing such a rejection.* See *Ex parte Grier*, 1923 C.D. 27, 309 O.G. 223 (Comm’r Pat. 1923); *Ex parte Hay*, 1909 C.D. 18, 139 O.G. 197 (Comm’r Pat. 1909).”

Examiner Kim is not a primary examiner. Although his primary examiner Mr. Sam Rimell rubber stamped the Final Rejection, there is no indication that any care at all was exercised by Primary Examiner Rimell in authorizing such a final rejection of allowed claims or Examiner Kim in making such a rejection.

In addition, the Examiner applied his incorrect assertions specifically to the Appellant’s invention, a vertical search engine, by asserting that “search engines are not necessary to the operability of the Internet.” (Final Office Action, Page 10). The Board is urged to stop here and re-read this assertion by the Examiner several

times. How does the Examiner propose anyone find anything on the Internet, which includes in excess of more than 3-4 billion web pages, without search engines?

Fourth, the Examiner rejected Claims 3, 24 and 25 under 35 U.S.C. 103(a) as being unpatentable over BERSTIS, in view of BRADY, and in further view of *Official Notice*.

The Examiner made several admissions about BERSTIS and BRADY and the Appellant accepted the admissions as follows:

The Examiner admits that BERSTIS and BRADY differ from the claimed invention in that they fail to specifically disclose that the DNS for the Internet is included in the DNS for the network (claims 3 and 25). *The Applicant accepts this admission.*

The Examiner admits that BERSTIS and BRADY differ from the claimed invention in that they fail to specifically disclose that the opening of a .COM, .EDU, .GOV, .MIL, .NET or .ORG top-level domain name file (claim 24). *The Applicant accepts this admission.*

The Applicant traversed the assertion of Official Notice taken by the Examiner as follows.

The Examiner is reminded that there must be some form of evidence in the record to support an assertion of Official Notice. *In re Lee*, 277 F.3d at 1344-45 (Fed. Cir. 2002). The Examiner has not provided any such evidence other than to assert that "it would have been obvious to one of ordinary skill in the art at the time the invention was made."

The Applicant traverses this assertion of Official Notice as being defective and improper because: (1) the Examiner admitted that Neither Berstis nor Brady alone or in combination teach the claim limitations the Examiner took Official Notice of; (2) Claims 3, 24 and 25 are dependent claims addition the additional limitations to the corresponding independent claims that are not obvious in combination; (3) these dependent claims add additional limitations to the vertical search engine with the specific features claimed by the Applicant; (4) there were very few vertical search engines in existence period when the Applicant filed the original parent application in 2001 that the current divisional application is based on and there are still very few vertical search engines used at all on the Internet; (5) there were no vertical search engines with the claim elements of the combination of

the independent and dependent claims that the Applicant knew about at the time the application was filed.

Since the Applicant has adequately traversed the Examiner's assertion of Official Notice, the Examiner must provide documentary evidence of proof for the Office Notice with the rejected claim limitations used in a vertical search engine at the time the Applicant filed the application in the next Office action if the rejection is to be maintained. *In re Zurko*, 258 F.3d 1379, 1697(Fed. Cir. 2001). The Applicant respectfully requests such evidence. (First Response, Pages 26-29).

The Examiner asserts "The Applicant has inadequately traversed the Official Notice and is therefore deficient, no document evidence shall be provided by the Examiner. Accordingly, because of the Applicant's inadequate traversal, it is noted the rejections of claims 3 and 24-25 have been modified to indicate that the limitations of the claims, which are well-known in the art, are now taken to be as admitted prior art." (Final Office Action pages 13-14).

The Examiner then goes on to assert that the Appellant should review the MPEP 2144.02, which address the topic of Official Notice. The Examiner underlined for emphasis the statement "including stating why the noticed fact is not considered to be common knowledge or well-know in the art."

These assertions clearly show the Examiner erred in the application of MPEP §2144.02.

As cited the Appellant above in items 1-5 of the Appellant's traversal of official notice and more specifically items 4 and 5, the Appellant specifically stated that since vertical search engines were rare at the time the Appellant filed the parent application in 2001 (and are still rare today), that the combination of features claimed by the Appellant in the dependent claims, along with the features claimed

in the independent claims for vertical search engines could not be considered common knowledge or well-known in the art.

The Board should request that Examiner Kim, without further research and without using the Appellant's vertical search engine products, provide the Board with a list of vertical search engines the Examiner can name from memory. Since vertical search engines are still very rare on the Internet, the Appellant doubts the Examiner (very respectfully or the Board) could even name one vertical search engine from memory. As such, the claimed features of the Appellant's vertical search engine could not be well known and are not well-known or common knowledge in the art at the time the application was filed and are still not now.

The current application, filed in 2004, is a divisional of a parent application filed July 31, 2001. Vertical search engines were not well known in 2001 when the parent application was filed, were not well known in 2004 when the present application was filed and are still not well known.

As further evidence the Appellant submits three articles included as Exhibits C-E.

The first, Exhibit C, written in 2005, entitled, "LookSmart launches Vertical Search Engines Aimed at Targeted Demographics," states LookSmart announced the launch of its first five vertical search engines.

The second, Exhibit D, written in 2006, entitled "What is a vertical search?" states indeed.com one of the first vertical job search engines was founded in 2004. In the third article, Exhibit E, written in 2005, the author says silicon valley is buzzing with vertical search. All of these examples have dates years after 2001 date

the Appellant filed the parent application for this matter. Further evidence the claimed features of the Appellant's invention could not have been well known at the time the application was filed. If the Examiner had fully considered the file history at the time he prepared the First Office Action, none of these arguments would have been necessary.

Finally, the Examiner asserts that "The Applicant has clearly misapplied both case law and patent rules which are clearly stated for software inventions as clarified by the Interim Guidelines." (Final Office Action, Page 9).

However, the Examiner has not stated which cases or patent rules the Appellant has misapplied. The Examiner should read his own words and read the case law and patent rules for software inventions.

The Appellant will point out all of the other errors the Examiner made with respect to his section 101 analysis in the next section.

CONCLUSION FOR REJECTION 1

The Appellant has clearly pointed out the errors made by the Examiner with respect to his application of U.S. Patent Law.

ARGUMENT FOR REJECTION 2

The Examiner asserted that Claims 1-13 are rejected under 35 U.S.C. 101 because “the claimed invention is directed towards non-statutory subject matter. The claims are directed toward ‘a method for creating a vertical search engine’ and are non-statutory because they do not encompass tangible subject matter and/or embodiments which fall within a statutory category. The claims make no mention of a tangible medium wherein existing code may be processed to perform the recited claims. See *State Street Bank* and MPEP 2106. The claimed invention as a whole must accomplish a practical application. The claimed invention as a whole must accomplish a practical application. That is it must produce a ‘useful, concrete and tangible result (emphasis on tangible added by the Examiner).

The Examiner further asserts “in the present application,...more importantly fail to recite a ‘useful, concrete and tangible result.’ The method claims may be considered to be software, *per se*, since the claims fail to be integrated into a computer hardware system for execution. Therefore, since the claims simply recite steps of implementation, said claims constitute non-statutory subject matter by failing to fall into a statutory category. (Final Office action pages 2-3).

Claim 1 recites:

1. A method for creating a vertical search engine, comprising:
 - receiving a list of a plurality of keywords to be used for the vertical search engine on a network device, wherein the list of keywords includes general and specific keywords for a selected subject;
 - processing the list of plurality of keywords to create a refined list of keywords, wherein the processing includes adding, subtracting or modifying automatically the list of plurality of keywords;
 - creating a plurality of first index files associated with a plurality of first data

files by checking a plurality of domain names from a plurality of domain name files associated with a domain name system for a computer network, wherein the plurality of first index files include a plurality of pointers to the associated data files, and wherein the plurality of first data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with a plurality of active domain names from the plurality of domain name files;

creating a plurality of second index files with associated plurality of second data files by searching the plurality of first index files for keywords from the refined list of keywords, wherein the plurality of second index files include a plurality of pointers to the associated plurality of second data files, and wherein the plurality of second data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with the plurality of active domain names for keywords from the refined list of keywords;

verifying that entries in the plurality of second index files are appropriate for the selected subject;

creating a final index from the plurality of entries first index; and

making a vortal accessible on another network device via the computer network for the selected subject using the final index.

There are many errors with the Examiner's assertions. First, the Board will note that for the purposes of an eligibility requirement, a physical transformation "is not an invariable requirement." AT&T, 172 F.3d at 1358-59. Even though the Examiner insists that it is.

The MPEP clearly states that USPTO personal shall review the claims to determine if the invention produces a *useful, tangible, and concrete result*. The Board will note that making this determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the final result achieved by the claimed invention is "useful, tangible, and concrete." MPEP §2106.

The criteria for determining a useful, tangible and concrete result are clearly set forth in the MPEP in §2106. Criteria the Examiner did not follow in this matter.

The MPEP clearly states in determining whether a claim provides a practical application of a 35 U.S.C. 101 that produces a useful, tangible, and concrete result, USPTO personnel should consider and weigh these factors.

(a) **USEFUL:** The USPTO's official interpretation of the useful utility requirement provides that the utility of an invention has to be (i) specific, (ii) substantial and (iii) credible. MPEP § 2107 and *Fisher*, 421 F.3d at 1372, 76 USPQ2d at 1230.

(i) **Specific:** A "specific utility" is *specific* to the subject matter claimed and can "provide a well-defined and particular benefit to the public." *In re Fisher*, 421 F.3d 1365, 1371, 76 USPQ2d 1225, 1230 (Fed. Cir. 2005).

The claimed invention clearly is specific. It creates a vertical search engine vortal for a pre-determined set of keywords by gathering and processing information from the Internet or other computer network. The vertical search engine provides a *greater depth than breath* for the keywords. The claimed invention provides a well-defined and particular benefit to the public, namely, offering a user an alternate method over other available general search engines (e.g., Google, Yahoo, Ask, etc.) that provide greater breath than depth, for selected keywords to more easily and concisely search for information based on selected keywords available the Internet or other computer networks with a user having to manually process information themselves by viewing and rejecting unwanted or inappropriate information. Thus, the claimed invention is *specific* under the holding of *In re Fisher*.

(ii) **Substantial:** An application must show that an invention is useful to the public as disclosed in its current form, not that it may prove useful at some future

date after further research. Simply put, to satisfy the 'substantial' utility requirement, an asserted use must show that the claimed invention has a significant and presently available benefit to the public." *Fisher*, 421 F.3d at 1371, 76 USPQ2d at 1230.

The claimed invention clearly is useful to the public as disclosed in its current form. In fact the Applicant has a viable business enterprises based in part on the claimed invention providing vertical search engine vortals via the Internet and other computer networks. The Board is encouraged to visit the URLs "http://www.logika.net/prod_vert.asp" and "http://platinum.fusionbot.com." Print outs from these web pages are included as Exhibits F and G.

The claimed invention has a significant and presently available benefit to the public. It allows a user to access a vertical search engine on a selected topic (e.g., Golf) and type in fewer keywords for more abstract keywords (e.g., Tiger for information on Tiger Woods, etc.) than is possible on a general search engine and be relieved of the burden of manually processing unwanted and inappropriate information. Thus, the claimed invention is *substantial* under the holding of *In re Fisher*.

(iii) Credible: An applicant need only make one credible assertion of specific utility for the claimed invention to satisfy 35 U.S.C. 101. See, e.g., *Raytheon v. Roper*, 724 F.2d 951, 958, 220 USPQ 592, 598 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 835 (1984) holding when a properly claimed invention meets at least one stated objective, credible utility under 35 U.S.C. 101 is clearly shown. Thus, the claimed invention is credible under the holding of *In re Fisher*.

Thus, the claimed invention clearly produces useful results, namely, providing another type of search engine, a vertical search engine, providing searches with more depth than breath, for a users of the Internet and other computer networks.

(b) TANGIBLE: First, the tangible requirement does not necessarily mean that a claim must either (1) be tied to a particular machine or apparatus or (2) must operate to change articles or materials to a different state or thing. MPEP §2106.

The Examiner places great emphasis on the Appellant's invention not being tangible because it is allegedly not integrated into any computer hardware system for integration.

The claimed invention is actually tied to a particular machine, or apparatus (i.e., a network device) and changes articles or materials to a different state or thing.

Claim 1 recites "*receiving a list of a plurality of keywords to be used for the vertical search engine on a network device;*" and "making a vortal accessible on another network device via the computer network for the selected subject using the final index."

First, the claimed invention is tied to tow particular machines or apparatus, namely, a network device and another network device which both include a computer hardware system used for execution.

Clearly, the Examiner does not understand computer science or engineering nor the patent law since the Examiner is asserting, a hardware device with one or more processors and a memory executing instructions to perform the invention is not a computer hardware system.

First, a network device would clearly be recognized by someone even with a minimal skill in the art to be a computer hardware system for execution.

Second, the Appellant's application clearly teaches that a network device (e.g., FIG. 1, 30) that accepts and processes keywords into a vortal and another network device (e.g., FIG. 1, 29) that makes the vortal available via the computer network such as the Internet (FIG. 1, 18) are computer hardware systems used for execution.

The Appellant clearly defines one type of network device as a client network device. *The client network devices 12, 14, 16 include, but are not limited to, personal computers, wireless devices, laptop computers, mobile phones, personal information devices, personal digital assistants, hand-held devices, network appliances, pagers, and other types of electronic devices.* (Application, page 9, lines 6-10).

All of these network device are clearly computer hardware systems for execution. There is no way the Examiner can argue otherwise.

The Appellant also defines another type of a network device as a server network device (**Application, page 9, lines 15-19**).

The Appellant further teaches these server network devices *"include a processing system with at least one high speed Central Processing Unit ("CPU") and a memory. In accordance with the practices of persons skilled in the art of computer programming, the present invention is described below with reference to acts and symbolic representations of operations or instructions that are performed by the processing system, unless indicated otherwise. Such acts and operations or instructions are referred to as being "computer-executed," "CPU-executed," or "processor-executed." It will be appreciated that acts and symbolically represented operations or instructions include the manipulation of electrical signals or biological signals by the CPU. An electrical system represents data bits which cause a resulting transformation or reduction of the electrical signals, and the maintenance of data bits at memory locations in a memory system to thereby reconfigure or otherwise alter the CPU's operation, as well as other processing of signals. The memory locations where*

data bits are maintained are physical locations that have particular electrical, magnetic, optical, or organic properties corresponding to the data bits.

The data bits may also be maintained on a computer readable medium including magnetic disks, optical disks, organic memory, and any other volatile (e.g., Random Access Memory ("RAM")) or non-volatile (e.g., Read-Only Memory ("ROM")) mass storage system readable by the CPU. The computer readable medium includes cooperating or interconnected computer readable medium, which exist exclusively on the processing system or be distributed among multiple interconnected. (Application, page 11, line 7 through page 12, line 6).

This description clearly makes the server network devices statutory under 35 USC 101 since the server network device is a "machine" with a CPU that is programmed to transform memory bits based on electronic signals from one state into another based on programmed instructions. Such hardware computer machine with CPU and a processor programmed with computer software has been patentable since *Benson*.

Third, the claimed invention changes articles or materials to a different state or thing. The claimed invention processes a list of keywords to create a refined list, a change in the list of keywords. The claimed invention also changes a first set of index files into and a second set of index files and creates a final index fro the second set of index files that is used for a vortal. In addition, these changes in software elements are at the lowest level changes in bits in a memory on the server network device and are manipulated by a CPU, a programmed machine. How, can the Examiner not understand such a simple computer engineering concept?

This description clearly makes the claim statutory under 35 USC 101 since the claimed invention changes articles (i.e., data bits in memory of the server device) into several different states of things.

The claimed invention clearly produces a practical application that produces a real-world result, namely, a vertical search engine vortal created from keywords and by processing and summarizing information associated with the keywords from and presenting to a user a unique type of search engine that includes more depth than breath for the keywords that is used from a computer network like the Internet.

What more tangible result can a user of the Internet be provided than a specific kind of search engine that relieves a user from manually viewing, processing and eliminating inappropriate or unwanted information? How else would a user obtain information form the Internet without a search engine?

Thus, the Appellant's claimed invention clearly produces tangible results. It is clearly incorrect for the Examiner to assert otherwise.

(c) **Concrete:** The MPEP at 2106 states "Usually, this question arises when a result cannot be assured. In other words, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. *In re Swartz*, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000).

The claimed invention includes a process that is substantially repeatable that substantially produces the same results. What good would a search engine be if a user couldn't repeat a search or obtain the same results?

Thus, the Appellant's claimed invention is clearly *concrete*. It is clearly incorrect for the Examiner to assert otherwise.

The Examiner asserts that "search engines are not necessary to the operability of the Internet." (Final Office Action, page 10). The only way this statement is true is that no person in the world anywhere ever desired to find any information on the Internet. This assertion show either the Examiner clearly understand nothing about the Internet or is clearly biased towards the Appellant's invention, or both.

The Appellant's claimed invention illustrated by Claim 1 is clearly is statutory subject matter and clearly produces useful, concrete and tangible result under all case law as well as the Interim Examination Guidelines.

The Examiner further asserts "Applicant asserts the argument that claim 2 does include a computer readable medium. The Examiner agrees. However, for the purposes of clarification, it is noted that the rejection of Claim 2 under 35 U.S.C. 101 is sustained in that claim 2 fails to remedy the non-statutory subject matter deficiencies of Claim 1. That is while Claim 2 recites 'the method of Claim 1 further comprising a computer readable medium have stored therein instructions for causing a processor to execute the steps of the method.' That is the limitations of Claim 2 may be considered to be software, per se, since the claims fail to be integrated into a computer hardware system for execution. Since the claim simply recites that the instructions are "for causing a process to execute the steps of the method" and fails to claim a process where an integrated computer hardware system

is executing the computer program's instructions, the claim fails to qualify as a process claim and is considered non-statutory functional descriptive material."

Respectfully, this analysis borders on being nonsensical. The Appellant ponders whether the Examiner understands what the components of a computer include. First, as was illustrated above Claim 1 is clearly statutory subject matter. Second, Claim 2 includes a computer readable medium (i.e., hardware, e.g., a memory, floppy disk, CD-Rom, RAM, ROM, etc.) having stored therein instructions (i.e., software, e.g., a program) for causing a processor (i.e., hardware) to execute the steps of the method (i.e., a programmed machine including a processor, a memory, instructions executed in memory to output a useful, concrete and tangible result). Thus, this claim clearly recites a hardware and software system in a statutory category, namely, a programmed machine. Such a programmed machine with hardware and software components has been statutory since *Benson*.

In addition, the Examiner has stated that Claim 2 includes non-statutory subject matter. As late as October 2007, other Examiner's at the USPTO have found the similar language to encompass statutory subject matter by simply mentioned "computer readable mediums" and not mentioning a processor as the Appellant has in this matter. In addition, the USPTO has granted a large number of patents filed and prosecuted by the Appellant's attorney with hundreds of dependent claims with exactly the same language as is illustrated in Claim 2. The Appellant understand every matter is considered on its own merits for patentability. However, the Examiner's analysis is clearly wrong with respect to this dependent claim.

CONCLUSION FOR REJECTION 2

The Appellant has clearly illustrated why the Section 101 rejection of Claims 1-13 and 26-27 is mis-application of U.S. Patent Law and Rules. Thus, the Section 101 must be immediately withdrawn.

ARGUMENT FOR REJECTION 3

Independent Claims 1 and 23

The Examiner is reminded that to establish a *prima facie* case of obviousness in the first place, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all of the claim limitations. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

The Examiner is reminded that to establish a case of *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested. *In re Royka* 400 F.2d 981 (CCPA 1974).

The Examiner asserts that BERSTIS, in combination with BRADY, discloses all of the elements in Independent Claims 1 and 23.

However, the Examiner meticulously cited sections of BERSTIS and BRADY for all the elements of independent Claim 1, except for two claim elements. The Examiner did not find anywhere in BERSTIS or BRADY individually, or the combination thereof, at least two elements of independent Claim 1 including: “*verifying that entries in the plurality of second index files are appropriate for the selected subject; and*

making a vortal accessible on another network device via the computer network for the selected subject using the final index.”

The Examiner again was incomplete and sloppy in his analysis.

Since the prior art references do not teach all of the claim elements by the Examiners own words and analysis, the Examiner has not established a prima facie case of obviousness in violation of the holding of *In re Vaeck* and *In re Royka*. Thus, Section 103 rejection is clearly improper, must be immediately withdrawn. The Applicant need not respond any further because the Examiner has not established a prima facie case of obviousness.

The Examiner, failing to find a teaching for all the claim elements in the combination of BERSTIS and BRADY then tries to overcome his failings but stating the missing claim elements are obvious by simply asserting "It would have been obvious to one of ordinary skill in the art at the time the invention was created to verify that the entries in the second index files fall within the selected subject for the vortal. Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was created to have the vortal available for access by another network device via a general computer network. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by BERSTIS and BRADY."

The Examiner's assertions are clearly is mis-application of U.S. Patent Law. The Examiner simply cannot say claim elements he does not find in the combination of references are obvious to one of ordinary skill in the art.

The holding of *All-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308 (Fed. Cir. 1999) clearly states “the level of skill in the art cannot be relied upon to provide the suggestion to combine references.”

The holding of *Ex Parte Levengood*, 217 F.3d 1365 (Fed. Cir. 2000) also clearly states a making a statement that a claimed invention would have been within the ordinary skill of the art at the time the invention was made is not sufficient to establish a *prima facie* case of obviousness.

The Examiner then asserts “One of ordinary skill in the art would have been motivated to do this modification so that in creating a vertical search engine, keywords are processed to be included in a final index such that the final index correlates to a specific subject or topic.”

The Examiner is reminded that the mere fact that the references can be combined or modified (which is not the case in this matter) does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). Neither BERSTIS and BRADY suggest such a combination, and in fact teach away from such a combination as is discussed below.

The Examiner is reminded that a *prima facie* case of obviousness can be rebutted by showing that the art, in any material respect teaches away from the claimed invention. *In re Geisler*, 116 F.3d 1465 (Fed. Cir. 1997).

Berstis teaches “Conventional search engine applications maintain a centralized keyword index which consumes considerable space and requires frequent and time consuming updates. The problem of traffic overload on conventional search engines caused by such centralized functionality can be

eliminated by first migrating and distributing a portion of the searching and indexing functionality to local sites and servers...local sites support local search engines which perform indexing of all pages maintained at each respective site. A global, top-level search engine maintains and periodically updates its own master index. During such updates, the global search engine incorporates information from the locally maintained indices at each Web site. In an alternate embodiment, the global search engine would retrieve only the Internet Protocol (IP) address of the local sites associated with word-to-page links relating to the searched words. In this manner, when a user commences a search, the global search engine responds by providing a list of sites (site addresses) rather than page addresses.” (Col. 4, lines 55-67).

Brady teaches an automated method of creating and updating a database of resumes and related documents (Abstract).

The claimed invention has no such limitations. Thus, Bertsis alone, Brady alone and the combination thereof clearly teaches away from the claimed invention in several material respects. Therefore, even if the Examiner had established a *prima facie* case of obviousness, and as discussed above, the was not true in this matter since the Examiner did not find all of the claimed elements of the claimed invention, any *prima facie* case of obviousness is rebutted based on the holding of *In re Giesler*.

The Examiner is also reminded that if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984).

Berstis teaches “Conventional search engine applications maintain a centralized keyword index which consumes considerable space and requires frequent and time consuming updates. The problem of traffic overload on conventional search engines caused by such centralized functionality can be eliminated by first migrating and distributing a portion of the searching and indexing functionality to local sites and servers. In one embodiment of the present invention, local sites support local search engines which perform indexing of all pages maintained at each respective site (Col. 4, lines 48-54). Berstis also teaches requirement of using local search engines which perform indexing of all pages maintained at each respective local site instead of spiders or crawlers to update a centralized keyword index. (Col. 4, lines 55-67).

Brady teaches: “One particular aspect of this embodiment is where said method is used to create or update a database of publicly available resumes retrieved from a network of documents.” (Col. 6, lines 1-3). Brady also teaches use of a ‘spider or ‘crawler that refers to a sequence of computer commands in the form of a computer program, subroutine or the like, that locate and retrieve documents according to specified criteria from a network of documents, such as, the Internet, the World Wide Web, LANs, intranets, or the like. (Col. 4, lines 11-15). “For example in the instance where the spider is retrieving publicly available resumes and publications from the web, a retrieved resume may provide a link to a publication directed to subject matter that is relevant to the position that is to be filled.” (Col. 5, lines 10-19).

Since Brady requires use of a spider or crawler and Bertsis in part was created to eliminate the use of a spider or crawler by requiring use of local search engines, combining Brady and Bertsis makes Bertsis unsatisfactory for one of its intended purposes of eliminating use of spiders and crawlers. Therefore, there is no suggestion or motivation to make the proposed modification based on the holding of *In re Grady*.

The Examiner is also reminded that evidence supporting no reasonable expectation of success of combining two references supports a conclusion of nonobviousness; *In re Reinhart*, 531 F.2d 1048 (CCPA 1976) and if the proposed modification or combination of the prior art would change the principal operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti* 270 F.2d 810 (CCPA 1959).

Bertsis, which eliminates the need for spider or crawlers by requiring local search engines on each site, could not be combined with Brady, which requires the use of spiders and crawlers to obtain resumes from the Internet, cannot be successfully combined because the combination would change the principle operation of Bertsis. Thus, the combination of Bertsis and Brady cannot render the claims *prima facie* obvious based on the holdings of *In re Reinhart* and *In re Ratti*.

Thus, Claims 1 and 23 are not obvious and the rejections of Claims 1 and 23 are improper. Therefore the rejection of Claims 1 and 23 must be immediately withdrawn.

Dependent Claims 2 and 4

The arguments for independent Claims 1 and 23 are incorporated by reference. Claims 2 and 4 are dependent claims that add additional limitations not included in the corresponding independent claims. The Examiner is reminded that if an independent claim is nonobvious under 35 U.S.C. 103, than any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Thus, Claims 2 and 4 are not obvious and the rejections of Claims 2 and 4 are improper. Therefore the rejection of Claims 2 and 4 must be immediately withdrawn.

CONCLUSION FOR REJECTION 3

Thus, Claims 1, 2, 4 and 23 are not obvious and the rejections of these claims are improper. Therefore the rejection of claims must be immediately withdrawn.

ARGUMENT FOR REJECTION 4

The Examiner **admitted** that BERTIS and BRADY differ from the claimed invention in that they fail to specifically disclose that the DNS for the Internet is included in the DNS for the network (claims 3 and 25). (First Office Action, Page 7)
The Applicant accepted this admission. (First Response, pages 25)

The Examiner **admitted** that BERTIS and BRADY differ from the claimed invention in that they fail to specifically disclose that the opening of a .COM, .EDU, .GOV, .MIL, .NET or .ORG top-level domain name file (claim 24). (First Office Action, Page 7). *The Applicant accepts this admission.* (First Response, page 25).

The Examiner asserted the Applicant had inadequately traversed the taking of Official Notice. This is clearly an erroneous assertion by the Examiner. The Appellant repeats the arguments made above.

The Applicant traversed the assertion of Official Notice taken by the Examiner as follows.

The Examiner is reminded that there must be some form of evidence in the record to support an assertion of Official Notice. *In re Lee*, 277 F.3d at 1344-45 (Fed. Cir. 2002). The Examiner has not provided any such evidence other than to assert that "it would have been obvious to one of ordinary skill in the art at the time the invention was made."

The Applicant traverses this assertion of Official Notice as being defective and improper because: (1) the Examiner admitted that Neither Bertis nor Brady alone or in combination teach the claim limitations the Examiner took Official Notice of; (2) Claims 3, 24 and 25 are dependent claims addition the additional limitations to the corresponding independent claims that are not obvious in combination; (3) these dependent claims add additional limitations to the vertical search engine with the specific features claimed by the Applicant; (4) there were very few vertical search engines in existence period when the Applicant filed the original parent application in 2001 that the current divisional application is based on and there are still very few vertical search engines used at all on the Internet; (5) there were no vertical search engines with the claim elements of the combination of the independent and dependent claims that the Applicant knew about at the time the application was filed.

Since the Applicant has adequately traversed the Examiner's assertion of Official Notice, the Examiner must provide documentary evidence of proof for the Office Notice with the rejected claim limitations used in a vertical search engine at the time the Applicant filed the application in the next Office action if the rejection is to be maintained. *In re Zurko*, 258 F.3d 1379, 1697(Fed. Cir. 2001). The Applicant respectfully requests such evidence. (First Response, Pages 26-29).

The Examiner asserts "The Applicant has inadequately traversed the Official Notice and is therefore deficient, no document evidence shall be provided by the Examiner. Accordingly, because of the Applicant's inadequate traversal, it is noted the rejections of claims 3 and 24-25 have been modified to indicate that the limitations of the claims, which are well-known in the art, are now taken to be as admitted prior art." (Final Office Action pages 13-14).

The Examiner then goes on to assert that the Appellant should review the MPEP 2144.02, which address the topic of Official Notice. The Examiner underlined for emphasis the statement "including stating why the noticed fact is not considered to be common knowledge or well-know in the art."

These assertions clearly show the Examiner erred in the application of MPEP §2144.02.

As cited the Appellant above in items 1-5 of the Appellant's traversal of official notice and more specifically items 4 and 5, the Appellant specifically stated that since vertical search engines were rare at the time the Appellant filed the parent application in 2001 (and are still rare today), that the combination of features claimed by the Appellant in the dependent claims, along with the features claimed in the independent claims for vertical search engines could not be considered common knowledge or well-known in the art.

The Board should request that Examiner Kim, without further research and without using the Appellant's vertical search engine products, provide the Board with a list of vertical search engines the Examiner can name from memory. Since vertical search engines are still very rare on the Internet, the Appellant doubts the Examiner (very respectfully or the Board) could even name one vertical search engine from memory. As such, the claimed features of the Appellant's vertical search engine could not be well known and are not well-known or common knowledge in the art at the time the application was filed and are still not now.

The current application, filed in 2004, is a divisional of a parent application filed July 31, 2001. Vertical search engines were not well known in 2001 when the parent application was filed, were not well known in 2004 when the present application was filed and are still not well known.

As further evidence the Appellant submits three articles included as Exhibits C-E.

The first, Exhibit C, written in 2005, entitled, "LookSmart launches Vertical Search Engines Aimed at Targeted Demographics," states LookSmart announced the launch of its first five vertical search engines.

The second, Exhibit D, written in 2006, entitled "What is a vertical search?" states indeed.com one of the first vertical job search engines was founded in 2004. In the third article, Exhibit E, written in 2005, the author says silicon valley is buzzing with vertical search. All of these examples have dates years after 2001 date the Appellant filed the parent application for this matter. Further evidence the claimed features of the Appellant's invention could not have been well known at the time the application was filed. If the Examiner had fully considered the file history

at the time he prepared the First Office Action, none of these arguments would have been necessary.

CONCLUSION FOR REJECTION 4

Thus, the rejections of Claims 3, 24 and 25 are improper. Therefore the rejection of Claims 3, 24 and 25 must be immediately withdrawn.

ARGUMENT FOR REJECTION 5

The Examiner **admitted** that BERSTIS and BRADY differ from the claimed invention in that they fail to specifically disclose the method of eliminating generic keywords and adding synonyms and modified spellings of keywords to the list (claim 5). *The Applicant accepted this admission.*

The Arguments for Claims 1 and 23 are incorporated by reference. Since the Applicant clearly explained by BERSTIS and BRADY were not obvious and the Examiner admitted that BERSTIS and BRADY did not teach the claim limitations of Claim 5, the combination of BERSTIS, BRADY and SULLIVAN cannot teach the limitations of Claim 5.

Claim 5 is a dependent claim that add additional limitations not included in the corresponding independent claims. The Examiner is reminded that if an independent claim is nonobvious under 35 U.S.C. 103, than any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

CONCLUSION FOR REJECTION 5

Thus, the rejections of Claim 5 is improper. Therefore the rejection of Claim 5 must be immediately withdrawn.

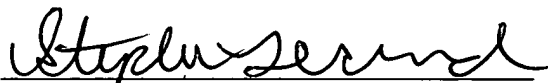
CONCLUSION FOR ALL ISSUES

For the foregoing reasons, Appellant submits that all of the Examiner's rejection of claims 1-13 and 23-27 are clearly erroneous. Accordingly, Appellant respectfully requests that the Appeal Board reverse all of the Examiner's rejection of claims 1-13 and 23-27 and immediately pass all claims 1-13 and 23-27 to allowance.

Respectively submitted:

Lesavich High-Tech Law Group, P.C.

Date: December 13, 2007

By: 
Stephen Lesavich, PhD
Registration No. 43,749

CLAIMS LISTING APPENDIX

Claims 1-13 and 23-27.

1. **(Original)** A method for creating a vertical search engine, comprising:

receiving a list of a plurality of keywords to be used for the vertical search engine on a network device, wherein the list of keywords includes general and specific keywords for a selected subject;

processing the list of plurality of keywords to create a refined list of keywords, wherein the processing includes adding, subtracting or modifying automatically the list of plurality of keywords;

creating a plurality of first index files associated with a plurality of first data files by checking a plurality of domain names from a plurality of domain name files associated with a domain name system for a computer network, wherein the plurality of first index files include a plurality of pointers to the associated data files, and wherein the plurality of first data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with a plurality of active domain names from the plurality of domain name files;

creating a plurality of second index files with associated plurality of second data files by searching the plurality of first index files for keywords from the refined list of keywords, wherein the plurality of second index files include a plurality of pointers to the associated plurality of second data files, and wherein the plurality of second data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with the plurality of active domain

names for keywords from the refined list of keywords;

verifying that entries in the plurality of second index files are appropriate for the selected subject;

creating a final index from the plurality of entries first index; and

making a vortal accessible on another network device via the computer network for the selected subject using the final index.

2. **(Original)** The method of Claim 1 further comprising a computer readable medium having stored therein instructions for causing a processor to execute the steps of the method.

3. **(Original)** The method of Claim 1 wherein the domain name system for the computer network includes the Domain Name System for the Internet.

4. **(Original)** The method of Claim 1 wherein the plurality of entries including electronic information extracted from a plurality of web-sites associated with a plurality of active domain names from the plurality of domain name files include a title, description, a uniform resource locator, or a pre-determined amount of electronic content associated with a web-site associated with an active domain name.

5. **(Original)** The method of Claim 1 wherein the processing step includes:
eliminating keywords that are too generic or have multiple meanings;
modifying keywords by adding alternative spellings or additional words; and
adding automatically synonyms for keywords to the list of plurality of
keywords to create the refined list of keywords.

6. **(Original)** The method of Claim 1 wherein the step of creating a plurality
of first index files includes:

opening a plurality of top-level domain name files associated with the domain
name system for the computer network;

checking a plurality of domain names from the plurality of open top-level
domain name files to determine whether any of the plurality of domain names are
associated with an active web-site on the computer network;

extracting domain names in the plurality of open top-level domain name files
associated with active web-sites on the computer network;

storing the extracted domains names in a plurality of entries in a plurality of
separate files, thereby creating a plurality of separate files including the plurality of
entries; and

sorting each of the plurality of separate files based on a pre-determined
sorting scheme to create a plurality of sorted separate files.

7. **(Original)** The method of Claim 6 wherein the step of opening a plurality
of top-level domain name files associated with a domain name system including
opening a .COM, .EDU, .GOV, .MIL, .NET or .ORG top-level domain name file

associated with the Internet domain name system.

8. **(Original)** The method of Claim 6 wherein the checking step includes attempting to visit a web-site on the computer network with a software spider to determine whether the web-site is active.

9. **(Original)** The method of Claim 6 wherein the checking step includes extracting electronic content from an active web-site on the computer network.

10. **(Original)** The method of Claim 6 wherein the extracting step includes:

(a) adding a first individual character component to a first file based on the first character of an entry, when the first individual character component was derived from an entry in one of the plurality of open top-level domain name files;

(b) moving the first character of the first individual character component to an end of the first individual character component, thereby exposing a next character and creating a next individual character component;

(c) adding the next individual character component to a next file based on the next character of the first individual character component;

(d) moving the next character of the next individual character component to an end of the next individual character component, thereby exposing a (next character+1) and creating a (next character+1) individual character component;

(e) adding the (next character+1) individual character component to a (next character+1) file based on the (next character+1) of the (next character+1) individual character component;

(f) repeating steps (d) and (e) until first character of the first individual character component is reached.

11. **(Original)** The method of Claim 6 wherein the storing step includes storing the plurality of individual character components in a plurality of separate files including one file for each letter of the English alphabet (A-Z), and the numbers zero through nine.

12. **(Original)** The method of Claim 6 wherein the sorting step includes sorting each of the plurality of separate files based on an ASCII value of characters stored in the plurality of separate files.

13. **(Original)** The method of Claim 1 wherein the step of creating a plurality of first index files includes:

(a) selecting a keyword from the refined list of keywords;
(b) determining whether the selected keyword comprises multiple words, and if so,

(c) selecting a word with the greatest number of individual characters from the multiple words comprising the selected keyword,

(d) opening a one of a plurality of sorted separate files based on a first character of the selected word from the selected keyword, wherein the plurality of sorted separate file were created by indexing a plurality of domain name files associated with a domain name system for the refined list of keywords, and

(e) searching the open sorted separate file for the selected word from

the selected keyword,

(f) repeating steps (c) through (e) for remaining words in the selected keyword;

and if not,

(g) opening a one of a plurality of sorted separate files based on a first character of the selected keyword, wherein the plurality of sorted separate file were created by indexing a plurality of domain name files associated with a domain name system for the refined list of keywords, and

(h) searching the open sorted separate file for the selected keyword;

(i) determining whether the selected keyword has been found in the open separate sorted, file, and if so,

(j) adding an entry to a first index file for the selected keyword;

(k) repeating steps (a), (b) and (i) for remaining keywords from the refined list of keywords.

14.-22 (Canceled).

23. (Original) A vertical search engine system, comprising in combination:

a vertical search engine server with associated database for indexing and searching a plurality of top-level domain name files associated with a domain name system for a computer network for a selected list of keywords for a selected topic, for indexing and searching electronic content from a plurality of web-sites identified by a plurality of domain names from the plurality of top-level domain name files and for creating a vortal index from the indexed plurality of top-level domain name files and the electronic content from the plurality of web-sites; and

a protocol stack on the vertical search engine server for communicating with other network devices on the computer network; and

a server network device for making a vortal accessible on a network device via the computer network for a selected subject using the vertical index created by the vertical search engine server.

24. **(Original)** The vertical search engine system of Claim 23 top-level domain name files associated with a domain name system including opening a .COM, .EDU, .GOV, .MIL, .NET or .ORG top-level domain name file associated with the Internet Domain Name system.

25. **(Original)** The vertical search engine system of Claim 23 wherein the domain name system for the computer network includes the Domain Name System for the Internet.

26. **(Original)** A method for creating a vertical search engine, comprising:
receiving a list of a plurality of keywords to be used for the vertical search engine on a network device, wherein the list of keywords includes general and specific keywords for a selected subject;

processing the list of plurality of keywords to create a refined list of keywords, wherein the processing includes adding, subtracting or modifying automatically the list of plurality of keywords;

creating a plurality of first index files associated with a plurality of first data files by checking a plurality of domain names from a plurality of domain name files

associated with a domain name system for a computer network, wherein the plurality of first index files include a plurality of pointers to the associated data files, and wherein the plurality of first data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with a plurality of active domain names from the plurality of domain name files, wherein the step of creating the plurality of first index files includes:

opening a plurality of top-level domain name files associated with the domain name system for the computer network;

checking a plurality of domain names from the plurality of open top-level domain name files to determine whether any of the plurality of domain names are associated with an active web-site on the computer network;

extracting domain names in the plurality of open top-level domain name files associated with active web-sites on the computer network;

storing the extracted domains names in a plurality of entries in a plurality of separate files, thereby creating a plurality of separate files including the plurality of entries; and

sorting each of the plurality of separate files based on a pre-determined sorting scheme to create a plurality of sorted separate files;

creating a plurality of second index files with associated plurality of second data files by searching the plurality of first index files for keywords from the refined list of keywords, wherein the plurality of second index files include a plurality of pointers to the associated plurality of second data files, and wherein the plurality of second data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with the plurality of active domain

names for keywords from the refined list of keywords;

verifying that entries in the plurality of second index files are appropriate for the selected subject;

creating a final index from the plurality of entries first index; and

making a vortal accessible on another network device via the computer network for the selected subject using the final index.

27. **(Original)** A method for creating a vertical search engine, comprising:

receiving a list of a plurality of keywords to be used for the vertical search engine on a network device, wherein the list of keywords includes general and specific keywords for a selected subject;

processing the list of plurality of keywords to create a refined list of keywords, wherein the processing includes adding, subtracting or modifying automatically the list of plurality of keywords;

creating a plurality of first index files associated with a plurality of first data files by checking a plurality of domain names from a plurality of domain name files associated with a domain name system for a computer network, wherein the plurality of first index files include a plurality of pointers to the associated data files, and wherein the plurality of first data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with a plurality of active domain names from the plurality of domain name files, wherein the step of creating a plurality of first index files includes:

(a) selecting a keyword from the refined list of keywords;

(b) determining whether the selected keyword comprises multiple words, and

if so,

(c) selecting a word with the greatest number of individual characters from the multiple words comprising the selected keyword,

(d) opening a one of a plurality of sorted separate files based on a first character of the selected word from the selected keyword, wherein the plurality of sorted separate file were created by indexing a plurality of domain name files associated with a domain name system for the refined list of keywords, and

(e) searching the open sorted separate file for the selected word from the selected keyword,

(f) repeating steps (c) through (e) for remaining words in the selected keyword;

and if not,

(g) opening a one of a plurality of sorted separate files based on a first character of the selected keyword, wherein the plurality of sorted separate file were created by indexing a plurality of domain name files associated with a domain name system for the refined list of keywords, and

(h) searching the open sorted separate file for the selected keyword;

(i) determining whether the selected keyword has been found in the open separate sorted, file, and if so,

(j) adding an entry to a first index file for the selected keyword;

(k) repeating steps (a), (b) and (i) for remaining keywords from the refined list of keywords;

creating a plurality of second index files with associated plurality of second data files by searching the plurality of first index files for keywords from the refined

list of keywords, wherein the plurality of second index files include a plurality of pointers to the associated plurality of second data files, and wherein the plurality of second data files include a plurality of entries including electronic information extracted from a plurality of web-sites associated with the plurality of active domain names for keywords from the refined list of keywords;

verifying that entries in the plurality of second index files are appropriate for the selected subject;

creating a final index from the plurality of entries first index; and

making a vortal accessible on another network device via the computer network for the selected subject using the final index.

EVIDENCE APPENDIX

The Appellant has cited various sections of the following documents included as Exhibits A-G via this Evidence Appendix in the arguments in the preceding pages.

1. **Exhibit A1** - First Office Action, **Exhibit A2** – Final Office Action
2. **Exhibit B** - First Appellant Response
3. **Exhibit C** – Online Article – “LookSmart Lauches Vertical Search Engines Aimed at Targeted Demographics,” April 1, 2005,
<http://www.enterprisesearchcenter.com/Articles/ReadArticle.aspx?ArticleID=7798>.
4. **Exhibit D** – Online Article – “What is vertical search?” , Juan Carlos Perez, InfoWorld, January 18, 2006,
http://www.infoworld.com/article/06/01/18/74292_HNverticalsearch_1.html.
5. **Exhibit E** – Online Article – “Vertical Search Creates Buzz In Silicon Valley,” Nick Wilson, March 16, 2005,
<http://www.searchnewz.com/searchnewz-1220050316VerticalSearchCreatesBuzzInSiliconValley.html>.
6. **Exhibit F**— Logika Fusion Bot -- http://www.logika.net/prod_vert.asp.
7. **Exhibit G** – Fusion Bot -- <http://platinum.fusionbot.com>.

RELATED PROCEEDINGS APPENDIX

None.